

# **Aerospace Engineer**



# Anita Abrego Aerospace Engineer

NASA Ames Research Center

My current work activities consist of rotorcraft research and wind tunnel testing. Daily activities vary from test scheduling, pretest planning, safety analysis, model buildup, instrumentation checkout, analyzing data, and writing research papers.

### Areas of expertise:

- · Rotorcraft research
- · Wind tunnel testing

#### How I first became interested in this profession:

Honestly, when I was ready to graduate from high school I didn't really know what engineering was about. My high school counselor suggested I look into engineering, and after browsing a book on careers in engineering, I went with it.

### What helped prepare me for this job:

There are a variety of things that help with preparing for this type of work (and life in general). Playing in sports helped me learn to focus, be a team player, and develop confidence. Learning to play a musical instrument taught me to have patience and to appreciate others.

Counselors, mentors, and summer internships helped with selecting the right classes. Technical writing and speaking classes helped me learn to become comfortable with speaking in front of groups. Internships helped with understanding the daily activities of engineering and guided me in choosing classes.

### My role models or inspirations:

My mom was my lifetime role model and inspiration. She taught me independence, personal strength, dealing with obstacles, perseverance, and how to look at life from different angles. It was her believing in me that taught me to believe in me.

### My education and training:

- B.S., Aeronautics and Astronautics (College of Engineering), University of Washington
- · M.S., Aerospace Engineering, University of Colorado

#### My career path:

My career at NASA began the summer after my sophomore year at the University of Washington. I was an "Engineer in training," assigned to a mentor in rotorcraft flight testing. Each summer throughout my undergraduate and graduate education, I returned to Ames, and after graduate school was hired as an Aerospace Engineer in the Aeromechanics Branch. I have been at Ames for 8 years.

### What I like about my job:

I am allowed to work on exciting projects and explore new areas/interests. This job allows me the opportunity to work with a variety of engineers, scientists, and on occasion I get to work with or meet NASA astronauts.

## What I don't like about my job:

That is a tough question. . . I guess if I could, I would love to be outside more.

#### My advice to anyone interested in this occupation:

Engineering is more than calculations, it is the concepts behind the calculations.

#### **Additional Resources:**

- American Institute of Biological Sciences http://www.aibs.org
- American Physiological Society http://www.faseb.org/aps
- American Society for Biochemistry and Molecular Biology http://www.biophysics.org/biophys/society/biohome.htm
- American Society for Microbiology http://www.asmusa.org
- Astrobiology Summer Academy http://academy.arc.nasa.gov/
- Biotechnology Industry Organization http://www.bio.org/welcome.html
- Earth to Orbit: Engineering Design Challenges http://eto.nasa.gov/
- Education Pays Calculator
  http://www.educationpays.org/calc.asp
- Graduate Student Researchers Program http://spacelink.nasa.gov/Instructional.Materials/NASA.Educa tional.Products/Graduate.Student.Researchers.Program.Brochur e/.index.html
- MATHCOUNTS Competition http://mathcounts.org/
- Minority University Research and Education Programs http://mured.nasaprs.com/
- NASA Cooperative Education Program for college students http://spacelink.nasa.gov/Educational.Services/ NASA.Education.Programs/Student.Support/NASA.Cooperative .Education.Program/.index.html

- NASA Jobs http://nasajobs.nasa.gov/
- NASA Office of Life and Microgravity Sciences and Applications http://www.hq.nasa.gov/office/olmsa/
- NASA SHARP Internship Program for high-schoolers http://www.mtsibase.com/sharp/
- NASA Student Employment http://nasajobs.nasa.gov/stud\_opps/employment/index.htm
- NASA Student Involvement Program student contests http://www.nsip.net/index.cfm
- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE. http://core.nasa.gov
- Revolutionary Vehicle Concepts and Systems student competition http://avst.larc.nasa.gov/competitions.html
- Student's Guide to Astrobiology http://www.astrobiology.com/student.html
- Tech-Interns.com http://www.tech-interns.com/

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